

REMARKS

Claims 1-12, 14-28, 30-39 and 41-45 are pending. Of these, claims 1, 12, 17, 28, 33, 39 and 44 are written in independent format.

By this reply, claims 13, 29 and 40 have been canceled without intent of prejudice to or disclaimer of the subject matter contained therein.

DRAWING OBJECTIONS

On page 5, the drawings are objected to under 37 C.F.R. §1.83(a) for failing to show ever feature of the invention specified in the claims. In particular, the Examiner criticizes the drawings as not showing a "constellation of values," as is recited in claims 44-45. Applicant disagrees.

It is submitted that the skilled artisan would readily have recognized that, for example, second pane 204 of Fig. 2 illustrates a constellation of values, e.g., a table. Accordingly, by this reply, Applicant has clarified Paragraph No. 25 of the present specification to more literally describe what the skilled artisan would have understood.

It is further submitted that no changes to the drawings are needed in view of the clarification to the specification. Accordingly, withdrawal of the drawing objection is requested.

§ 102 REJECTION – BENHASE '616 PGPUB

Beginning on page 6 of the Office Action, claims 1-44 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pre-Grant Publication No. 2004/0243616 to Benhase et al. ("the Benhase '616 PGPub"). This rejection is traversed.

The Examiner refers Applicant to Fig. 4 of the Benhase '616 PGPub. Fig. 4 depicts a user interface display 400 with a tree and a table for displaying information associated with storage resources in a computer system; see Paragraph Nos. ("PGHs")

15 and 37. By inspection of tree portion 410 of display 400, a zero-level (or root-level) node, "SYSTEM A ROOT," has first-level nodes "SERVER A" and "SERVER B" that report to it. Second-level nodes "LSS A" and "LSS B" report to first-level node SERVER A. Third-level nodes "VOL. 1," "VOL. 2," "VOL. 3" and 'VOL. 4" are depicted as reporting to second-level node "LSS B". Reverse-video 412 is depicted around LSS B, showing that it has been selected by a user.

Fig. 3 of the Benhase '616 PGPub is a more generalized version of tree portion 410 of display 400. PGH 37 of the Benhase '616 PGPub states:

In the present example[, namely, that of Fig. 4], the nodes of the tree have indicia that represent various storage resources. For example, referring to the corresponding tree 300 of FIG. 3, N0 represents a root node of a storage system "A". This may be the only storage system associated with the user interface 400, or there may be other storage systems as well.

Node N0 in Fig. 3 corresponds to node SYSTEM A ROOT in Fig. 4. PGH 37 of the Benhase '616 PGPub states:

For example, in a user interface for storage resources of a computer system, the node indicia may represent various storage resources, such as a storage server, logical storage resources, volumes, disks, and the like, as illustrated below.

The Benhase '616 PGPub presumes that the only type of storage resource in a computer system is a storage server; see Fig. 1. By way of inspection of Fig. 4, node SYSTEM A ROOT is a root-level node, and SERVER A and SERVER B are the only two nodes that report to SYSTEM A ROOT. Hence, there is only one type of storage resource in SYSTEM A ROOT, namely servers, and the only two such servers are SERVER A and SERVER B.

Due to a user having selected the second-level node LSS B in tree portion 410 of Fig. 4, table portion 420 of display 400 displays rows corresponding to copy commands involving the third-level nodes (volumes) which report to LSS B. Table portion 420 can be described as having a left-side portion 430 and a right-side portion 460; see PGH 38.

Left-side portion 430 provides information regarding portions of third-level nodes "VOL. 1," "VOL. 2," "VOL. 3" and "VOL. 4" that are involved in copy commands, either as the source or target of the copy command. Right-side portion 460 provides the other resources involved in the copy relationships represented by the various copy commands depicted in Fig. 4.

Of the columns depicted in table portion 420 of Fig. 4, only one (namely column 432) will be assumed for the sake of discussion to indicate information that could be interpreted as some type of summary. More particularly, column 434 indicates the total number of sectors of a given volume that are involved in a copy command. By way of inspection, for example, VOL. 1 is depicted as being involved in three separate copy commands, namely: a copy command involving 5 sectors of VOL. 1 for which it is the target/recipient of the copied data; a copy command involving 2 sectors of VOL. 1 for which it is the source/provider of the copied data; and a copy command involving 3 sectors of VOL. 1 for which it is the target/recipient of the copied data.

INDEPENDENT CLAIMS 1, 17, 33 AND 44

A distinction over the Benhase '616 PGPub is not merely illustrating, in the same graphical portion, a tree hierarchy and a table of values as recited in claim 1 (for example), but also the following:

- adaptively arranging the table, in response to a selection of one of the first-category nodes via the GUI, to include the following,
 - one or more rows that present information about one or more second-category nodes, respectively, that report to a selected one among first-category nodes, and
 - two or more columns representing parameters of the one or more second-category nodes, respectively; and
- showing, in the rows, sums of individual values exhibited by elements of the group, respectively.

If the following is assumed for the sake of discussion, namely (1) that a logical volume according to the Benhase '616 PGPub represents an instance of a node in a second node-category where such a node corresponds to a group of elements, (2) that the sectors comprising a given volume represent the elements of the group to which the volume corresponds, and (3) that the condition of whether a sector is involved or not in a copy command represents a parameter of the node, then table portion 420 of display 400 of the Benhase '616 PGPub shows only one column (namely, column 434, again which indicates the total number of sectors involved in a copy command) indicative of some type of summary information such that any given row shows at most only one sum of individual values of a parameter (namely, the total number of sectors involved in a copy command), as explained above. Claim 1, however, recites showing, in the rows, sums (plural) of individual values exhibited by elements of the group, respectively.

Independent claims 17, 33 and 44 recite features similar to the noted distinction of claim 1, respectively, and thus at least similarly distinguish over the Benhase '616 PGPub. Claims 2-11, 18-27, 34-38 and 45 depend at least indirectly from claims 1, 17, 33 and 44, respectively, and thus at least similarly distinguish over the Benhase '616 PGPub.

INDEPENDENT CLAIMS 12, 28 AND 39

A distinction over the Benhase '616 PGPub is not merely illustrating a tree hierarchy that includes, in the tree hierarchy, one or more subset nodes belonging to a second node-category reporting to a corresponding instance of a first-category node (where each second-category subset node represents a subset thereof) as recited in claim 12 (for example), but also the following:

- illustrating the tree hierarchy as including at least two nodes belonging to a first node-category, the first-category node representing the total instances of a particular type among the storage-domain components,

- the at least two nodes representing at least two different ones from among the following types of storage domain components including a storage area network (SAN), an interconnect device, a storage device, a host, or a business application.

Again, the Benhase '616 PGPub presumes that the only type of storage resource in a computer system is a storage server. Hence, Fig. 4 of the Benhase '616 PGPub does not show at least two nodes representing at least two different ones from among the following types of storage domain components including a storage area network (SAN), an interconnect device, a storage device, a host, or a business application.

Independent claims 28 and 39 recite features similar to the noted distinction of claim 12, respectively, and thus at least similarly distinguish over the Benhase '616 PGPub. Claims 14-16, 30-32 and 41-43 depend from claims 12, 28 and 39, respectively, and thus at least similarly distinguish over the Benhase '616 PGPub. Again, by this reply, claims 13, 29 and 40 have been canceled, rendering their rejection moot.

WITHDRAWAL OF REJECTION

By failing to disclose each element of the rejected claims, the Benhase '616 PGPub cannot be regarded as anticipatory. Hence, the §102(e) rejection is improper and its withdrawal is requested.

<remainder of page intentionally left blank>

CONCLUSION

The issues raised in the Office Action are considered to be resolved. Accordingly, Applicant again requests a Notice of Allowance.

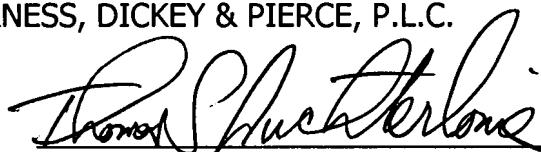
If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge any underpayment or non-payment of any fees required under 37 C.F.R. §§ 1.16 or 1.17, or credit any overpayment of such fees, to Deposit Account No. 08-0750, including, in particular, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

By:



Thomas S. Auchterlonie, Reg. No. 37,275
P.O. Box 8910
Reston, VA 20195
(703) 668-8000

TSA/cm:tsa